# Fast Ethernet OAM/IP In-band Managed Converter

# FRM220-100M

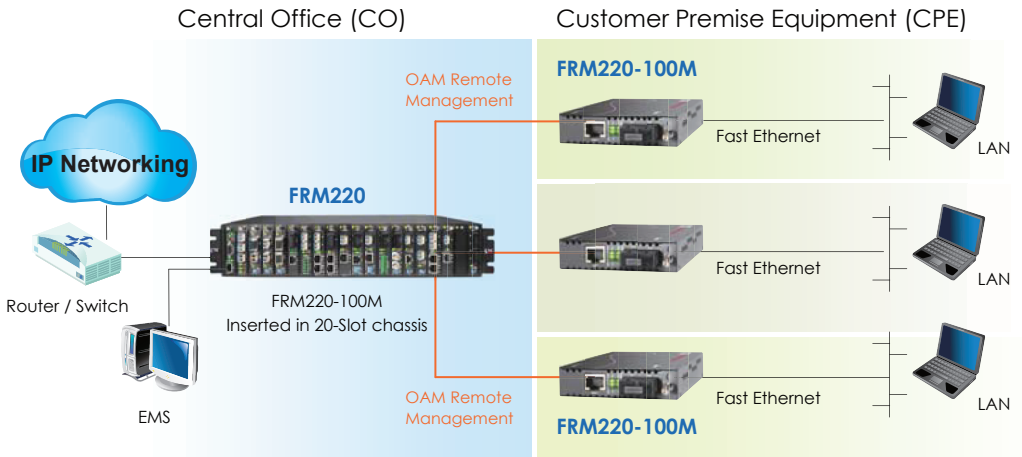
The FRM220-100M is an IEEE802.3ah OAM compliant copper to fiber Fast Ethernet solution designed to make conversion between 10/100Base-TX and 100Base-FX with SC, FC, ST connector. When deployed as a stand-alone solution, this media converter incorporates an easy to use Web user interface for operation, administration and maintenance of both local and remotely connected FRM220-100M converters. By offering 802.3ah OAM compliance, this converter can be linked to any 802.3ah compliant fiber switch and support loop back and dying gasp functions. When placed in our centrally controlled and managed rack, all functions of this converter and the remotely connected converter can be configured and monitored via in-band management, including band-width control, duplex, speed, VLAN configuration and more.

## Features

- 1 Port 10/100BASE-TX to 100BASE-FX Converter
- Auto-Cross over for MDI/MDIX in TP port
- Auto-Negotiation or Manual mode in TP port
- Dying gasp (remote power failure detection) on standalone unit
- Supports Link Fault Pass Through ( LFP ) Function
- Supports Auto Laser Shutdown (ALS) Function
- Supports flow control Enable or Disable
- Supports Jumbo Frame 9K Packet
- Ingress/Egress Bandwidth control
- Support 802.3ah-OAM/IP in-band management (for standalone unit only)
- Firmware upgrade via Web (for standalone unit only)
- Password Setting (for standalone unit only)
- Allow IP settings Web or Console management (for standalone unit only)
- Supports 16 Tag VLAN Group (for standalone unit only)
- RMON counters (for standalone unit only)
- Supports Double VLAN tag (Q-in-Q) on standalone unit

## Specifications

| | | |
|---|---|---|
| **Optical Interface** | Connector | 1x9 (SC, ST, FC)(Option) |
| | Data rate | 100Mbps |
| | Duplex mode | Full duplex |
| | Fiber | MM 50/125μm, 62.5/125μm.<br>SM 9/125μm |
| | Distance | MM 2km, SM 15/30/50/80/120km,<br>WDM 20/40/60/80km |
| | Wavelength | MM 1310nm, SM 1310,1550nm<br>WDM 1310Tx/1550Rx (type A)<br>1550Tx/1310Rx (type B) |
| **Electrical Interface** | Connector | RJ-45 |
| | Data rate | 10Mbps, 100Mbps |
| | Duplex mode | Half / Full duplex |
| | Cable | 10Base-T Cat.3, 4, 5, UTP,<br>100Base-TX Cat.5, 5e or higher |
| Standard | | IEEE 802.3, IEEE 802.3u |
| Indications | | LED (Power, FX-Link, LAN Speed, LAN Link ) |
| Power Input | | Card : 12VDC Standalone : AC, DC options |
| Power Consumption | | < 4W |
| Dimension / Weight | | 155 x 88 x 23mm (D x W x H) ; 0.12kg |
| Temperature | | 0 ~ 60°C (Operating), -10 ~ 70°C (Storage) |
| Humidity | | 10 ~ 90% non-condensing |
| Certification | | CE, FCC, LVD, RoHS |
| MTBF | | 65,000 hrs |




## Ordering Information

| Model Name | Description |
|---|---|
| ***FRM220-100M*** | 10/100Base-TX to 100Base-FX Web smart OAM/IP managed converter |

Note: The card is suitable for using in CH01 standalone chassis.

Connector Type / Connectivity Distance

**FRM220 – 100M – □□□□□**

Example: FRM220 – 100M – SC002

| *Connector Type* | *Connectivity Distance* |
|---|---|
| SC, ST, FC | 002: 2km 015: 15km 030: 30km 050: 50km 080: 80km 120:120km<br>20A: WDM 20km A type 20B: WDM 20km B type 40A: WDM 40km A type 40B: WDM 40km B type<br>60A: WDM 60km A type 60B: WDM 60km B type 80A: WDM 80km A type 80B: WDM 80km B type |